

IN THE CLAIMS:

A complete listing of the claims is set forth below. Please amend the claims as follows:

1-10. **(Canceled)**

11. **(Previously Presented)** A computer-implemented system for managing data associated with available-to-promise (ATP) products, comprising:

a memory operable to store a hierarchy of at least two seller models that each represent a seller for one or more products, each product being associated with a product forecast model representing:

forecasted sales of the product through the seller;

planned supply of the product;

customer orders for the product through the seller; and

pre-allocated supply of the product to the seller, the pre-allocated supply being a supply of the product that has been pre-allocated to the seller for promising to subsequent customer orders for the product through the seller, the pre-allocation of the supply of the product to the seller occurring prior to distribution of the pre-allocated supply of the product to the seller; and

a processor coupled with the memory and operable to:

compute the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through the seller, the pre-allocated supply of the product to the seller, and the amount of the product that is ATP at one or more other sellers at a higher level in a seller hierarchy.

12. **(Previously Presented)** The system of Claim 11, further operable to adjust the pre-allocated supply of the product to the seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria

13. **(Previously Presented)** The system of Claim 11, further operable to:

- communicate forecast models to a remote system;
- receive from the remote system a promise computed *at* the remote system for a customer order requesting a quantity of a product through the seller, the promise being computed according to the pre-allocated supply of the product to the seller;
- receive from the remote system adjusted forecast models reflecting the promise; and
- recompute the amount of the product that is ATP at the seller.

14. **(Previously Presented)** The system of Claim 13, wherein:

- all forecast models for one or more sellers are communicated to the remote system; and
- the system is further operable to:
 - receive from the remote system the promise also computed according to the amount of the product that is ATP *at* the one or more other sellers at the higher level in the seller hierarchy; and
 - adjust the amount of the product that is ATP at the one or more other sellers at the higher level in the seller hierarchy if the promise exceeds the pre-allocated supply of the product to the seller.

15. **(Previously Presented)** The system of Claim 11, wherein the forecast model further represents a quantity of the product the seller has committed to selling, the system operable to adjust the pre-allocated supply of the product to the seller according to the committed quantity.

16. **(Previously Presented)** The system of Claim 11, further operable to:

accept a customer order requesting a quantity of a product through the seller, and compute a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product to the seller.

17. **(Previously Presented)** The system of Claim 11, wherein:

each forecast model is extensible such that one or more policy rules may be associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to the seller; and

either the forecasted sales or the pre-allocated supply of the product to the seller is computed according to the policy rules.

18. **(Previously Presented)** The system of Claim 11, further operable to adjust either the forecasted sales or the pre-allocated supply of the product to the seller according to an arrival rate of customer orders for the product through the seller.

19. **(Previously Presented)** A computer-implemented system for managing data associated with available-to-promise (ATP) products, comprising:

a memory operable to store a hierarchy of at least one seller model representing a seller for products that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction, each product being associated with a product forecast model representing:

forecasted sales of the product through the seller;

planned supply of the product;

customer orders for the product through the seller; and

pre-allocated supply of the product to the seller, the pre-allocated supply being a supply of the product that has been pre-allocated to the seller for promising to subsequent customer orders for the product through the seller, the pre-allocation of the supply of the product to the seller occurring prior to distribution of the pre-allocated supply of the product to the seller; and

a processor coupled with the memory and operable to:

compute the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through the seller, the pre-allocated supply of the product to the seller, and the amount of the product that is ATP at one or more other sellers at a higher level in a seller hierarchy.

20. **(Previously Presented)** The system of Claim 19, wherein the restrictions are selected from the group consisting of price restrictions, quantity restrictions, and lead time restrictions.

21. **(Previously Presented)** The system of Claim 19, further operable to adjust the pre-allocated supply of the product to the seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

22. **(Previously Presented)** The system of Claim 19, further operable to:

- communicate forecast models to a remote system;
- receive from the remote system a promise computed at the remote system for a customer order requesting a quantity of one or more items through the seller, the promise being computed according to at least the pre-allocated supply for corresponding products;
- receive from the remote system adjusted forecast models reflecting the promise; and
- recompute the amounts of the corresponding products that are ATP at the seller.

23. **(Previously Presented)** The system of Claim 19, wherein the forecast model further represents a quantity of corresponding products the seller has committed to selling, the system operable to adjust the pre-allocated supply of the product to the seller according to the committed quantity.

24. **(Previously Presented)** The system of Claim 19, further operable to:

- accept a customer order requesting quantities of one or more items through the seller; and
- compute a promise for the customer order according to the pre-allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products.

25. **(Previously Presented)** The system of Claim 19, wherein:

each forecast model is extensible such that one or more policy rules may be associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to the seller; and

either the forecasted sales or the pre-allocated supply of the product to the seller are computed according to the policy rules.

26. **(Previously Presented)** The system of Claim 19, further operable to adjust either the forecasted sales or the pre-allocated supply for one or more products for the seller according to an arrival rate of customer orders for those products through the seller.

27. **(Previously Presented)** A method for managing data associated with available-to-promise (ATP) products, comprising:

accessing at least two seller models that each represent a seller for one or more products, each product associated with a product forecast model representing:

forecasted sales of the product through the seller;

planned supply of the product;

customer orders for the product through the seller; and

pre-allocated supply of the product to the seller, the pre-allocated supply being a supply of the product that has been pre-allocated to the seller for promising to subsequent customer orders for the product through the seller, the pre-allocation of the supply of the product to the seller occurring prior to distribution of the pre-allocated supply of the product to the seller; and

computing the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through the seller, the pre-allocated supply of the product to the seller, and the amount of the product that is ATP at one or more other sellers at a higher level in a seller hierarchy.

28. **(Previously Presented)** The method of Claim 27, further comprising adjusting the pre-allocated supply of the product to the seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

29. **(Previously Presented)** The method of Claim 27, further comprising:

communicating forecast models to a remote system;

receiving a promise computed at the remote system for a customer order requesting a quantity of a product through the seller, the promise having been computed according to the pre-allocated supply of the product to the seller;

receiving from the remote system adjusted forecast models reflecting the promise; and

recomputing the amount of the product that is ATP at the seller.

30. **(Previously Presented)** The method of Claim 29:

wherein all forecast models for one or more sellers are communicated to the remote system;

wherein the promise has also been computed according to the amount of the product that is ATP at the one or more other sellers at the higher level in the seller hierarchy; and

further comprising adjusting the amount of the product that is ATP at the one or more other sellers at the higher level in the seller hierarchy if the promise exceeds the pre-allocated supply of the product to the seller.

31. **(Previously Presented)** The method of Claim 27:

wherein the forecast model further represents a quantity of the product the seller has committed to selling; and

further comprising adjusting the pre-allocated supply of the product to the seller according to the committed quantity.

32. **(Previously Presented)** The method of Claim 27, further comprising:

accepting a customer order requesting a quantity of a product through the seller, and computing a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product to the seller.

33. **(Previously Presented)** The method of Claim 27, wherein:

each forecast model is extensible such that one or more policy rules may be associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to the seller; and

either the forecasted sales or the pre-allocated supply of the product to the seller is computed according to the policy rules.

34. **(Previously Presented)** The method of Claim 27, further comprising adjusting either the forecast values or the pre-allocated supply of the product to the seller according to an arrival rate of customer orders for the product through the seller.

35. **(Previously Presented)** A method for managing data associated with available-to-promise (ATP) products, comprising:

accessing at least one seller model representing a seller for products that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction, each product being associated with a product forecast model representing:

forecasted sales of the product through the seller;

planned supply of the product;

customer orders for the product through the seller; and

pre-allocated supply of the product to the seller, the pre-allocated supply being a supply of the product that has been pre-allocated to the seller for promising to subsequent customer orders for the product through the seller, the pre-allocation of the supply of the product to the seller; and

computing the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through the seller, the pre-allocated supply of the product to the seller, and the amount of the product that is ATP at one or more other sellers at a higher level in a seller hierarchy.

36. **(Previously Presented)** The method of Claim 35, wherein the restrictions are selected from the group consisting of price restrictions, quantity restrictions, and lead time restrictions.

37. **(Previously Presented)** The method of Claim 35, further comprising adjusting the pre-allocated supply of the product to the seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

38. **(Previously Presented)** The method of Claim 35, further comprising:

communicating forecast models to a remote system;

receiving a promise computed at the remote system for a customer order requesting a quantity of one or more items through the seller, the promise having been computed according to at least the pre-allocated supply for corresponding products;

receiving from the remote system adjusted forecast models reflecting the promise; and

recomputing the amounts of the corresponding products that are ATP at the seller.

39. **(Previously Presented)** The method of Claim 35, wherein:

the forecast model further represents a quantity of corresponding products the seller has committed to selling; and

further comprising adjusting the pre-allocated supply of the product to the seller according to the committed quantity.

40. **(Previously Presented)** The method of Claim 35, further comprising:

accepting a customer order requesting quantities of one or more items through the seller, and computing a promise for the customer order according to the pre-allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products.

41. **(Previously Presented)** The method of Claim 35, wherein:

each forecast model is extensible such that one or more policy rules may be associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to the seller; and

either the forecasted sales or the pre-allocated supply of the product to the seller is computed according to the policy rules.

42. **(Previously Presented)** The method of Claim 35, further comprising adjusting either the forecasted sales or the pre-allocated supply for one or more products for the seller according to an arrival rate of customer orders for those products through the seller.